Correspondence

TO THE EDITOR: Stage of disease is the most important prognostic factor in patients with gastric cancer, and it is rare to cure a patient with symptomatic gastric cancer.[2] Early gastric cancer, on the other hand, is effectively treated by gastrectomy with excellent long-term results. Detecting tumors at an earlier stage through some form of screening has, therefore, the largest potential for improving gastric cancer outcome.

Fecal occult blood testing and sigmoidoscopy are recommended as routine screening tests in patients over the age of 50 in the United States to detect colorectal polyps and malignancy. The incidence of gastric cancer (22,800 cases in 1996) in the United States, however, is only one-sixth that of colorectal cancer (133,500 cases in 1996).[2] The lower incidence of gastric cancer makes the yield of screening endoscopy lower than that for colorectal cancer. Also, upper endoscopy is less convenient for patients and more costly than sigmoidoscopy. As a result, screening endoscopy, although a highly sensitive and specific test for gastric cancer, is not considered cost-effective.[3]

A screening program is most likely to be cost-effective in a population with a high incidence of gastric cancer. We calculated the age-adjusted incidence rates of gastric cancer in patients of different ethnicities in Orange and San Diego/Imperial Counties, California to identify whether a population existed that would be suitable for a prospective trial of gastric cancer screening.

Asians in Orange County were at highest risk of developing gastric cancer. The annual age-adjusted risk of gastric cancer in Asian men in Orange County was 3.3 and 3.5 times as high as that in white men from 1988-1990 and 1991-1993, respectively. The annual age-adjusted risk of gastric cancer in Asian women in Orange County was 3.3 and 3.8 times as high as that in white women from 1988-1990 and 1991-1993, respectively. Black men in San Diego/Imperial Counties were approximately twice as likely to develop gastric cancer in comparison to white men. Latino men and women in both Orange and San Diego/Imperial Counties were nearly twice as likely to develop gastric cancer in comparison to white men and women.

The annual age-adjusted incidence of gastric cancer in Asian men in Orange County (31.4/100,000 from 1988-1990 and 26.9/100,000 from 1991-1993) was only slightly lower than the annual age-adjusted incidence of colorectal cancer in this population (38.3/100,000 from 1988-1990 and 38.5/100,000 from 1991-1993). In comparison, the annual age-adjusted incidence of gastric cancer in white men in Orange County (9.4/100,000 from 1988-1990 and 7.7/100,000 from 1991-1993) was much lower than the annual age-adjusted incidence of colorectal cancer in this population (59.1/100,000 from 1988-1990 and 52.1/100,000 from 1991-1993).

The incidence of gastric cancer in patients of Asian descent born in their native countries is even higher than that of Asians born in the United States. For example, the age-adjusted incidence of gastric cancer in men in Japan in five prefectures in the 1980s ranged from 73.6/100,000 to 93.3/100,000.[4] We were unable to stratify gastric cancer incidence based on country of birth but suspect that the incidence of gastric cancer in those Asian men living in Orange County who were born in their native countries is greater than 31.4/100,000. Public policy discussion should address whether the incidence of gastric cancer in this group is high enough to justify the implementation of a gastric cancer screening program. Further discussion is needed to determine which individual or combination of screening tests may be cost-effective in screening for gastric cancer in high-risk populations in this country.

H. pylori is an established risk factor for gastric cancer and between 40% to 60% of cancers of the antrum and body of the stomach have been attributed to infection with this organism.[5,6] While there is no data that *H. pylori* eradication modifies an individual's cancer risk, it is estimated that if 30% of distal cancers could be prevented by screening and treating *H.pylori* infected individuals, $25,000 would be spent per year of life saved.[3] In a high-risk group such as Japanese-Americans, screening and treatment is estimated to require less than $50,000 per year of life saved, even at 5% treatment efficacy. The cost-effectiveness of this primary prevention strategy requires a prospective study to prove its efficacy. Our data indicate that the high incidence of gastric cancer in Asians in Orange County make them a target group in which to implement a trial to assess the cost-effectiveness of identifying and treating H. *pylori* infection to prevent the subsequent development of gastric cancer.

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